

# KSS-FR

**Arichem KSS-FR** Non-Halogen Flame Retardant is a potassium salt of diphenyl sulfone sulfonate. More specifically, it is the potassium salt of a complex of diphenyl sulfone sulfonate and diphenyl sulfone disulfonate. The complex is produced using a proprietary process which provides the maximum available diphenyl sulfone content.

## Product Application

**Arichem KSS-FR** is a superior flame retardant for transparent polycarbonate compounds. It can also be used in translucent and opaque polycarbonate formulations. The Arichem KSS-FR polycarbonate formulation below has been shown to meet Underwriters Laboratories (UL) 94 V0 flame retardant requirements at a specimen thickness of 3.2 mm (1/8"). KSS-FR provides excellent flame retardant effectiveness while maintaining the transparency inherent in PC thermoplastics.

Formulation Component	Loading %
Polycarbonate (3 MFI homopolymer)	99.8
<b>Arichem KSS-FR</b>	0.2
UL 94 V0 @ 3.2mm	Pass

**Arichem KSS-FR** has been extensively evaluated in PC by global FR PC producers and is continuing to grow in commercial volume worldwide and is one of the more effective flame retardant compounds satisfying today's demand for non-halogen flame retardants.

## Product Description and Use or Loading Levels

**Arichem KSS-FR** is a white powder and provides flame retardant performance at fractional loading levels or at less than 0.6% by weight in the polycarbonate formulation. Therefore, it may be helpful to produce and utilize KSS-FR in concentrate form for more effective dispersion into the polycarbonate matrix. For some specific FR formulations, Arichem KSS-FR is used at fractional loadings in combination with other flame retardants such as brominated polycarbonate oligomer for PC and bisphosphate like RDP or BDP for PC/ABS formulations.

More information, samples, and specifications for **Arichem KSS-FR** are available upon request.

### For Sampling or Technical Inquiries:

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